| | Туре | # | Hits | Search Text | DBs | | Comment | Error Definit | Er |
|----------|------|-----|------|-----------------------------------|---------------------------------------|----------------------|---------|---|----|
| | | | | | | girang | מ | ion | r. |
| н, | BRS | Ll | 72 | clostridial adj neurotoxin | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/07/2 7 14:53 | | | 0 |
| 2 | BRS | L2 | 393 | botulinum adj toxin | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/07/2 7 14:53 | | *************************************** | 0 |
| 3 | BRS | L3 | 69 | clostridial adj toxin | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/07/2 7 14:53 | | *************************************** | 0 |
| 4 | BRS | L4 | 179 | target adj moiety | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/07/2 7 14:54 | | | 0 |
| 5 | BRS | LS | 136 | transmission adj compound | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/07/2 7 14:55 | | | 0 |
| 9 | BRS | L6 | 3846 | substance adj P | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/07/2 7 14:55 | | | 0 |
| 7 | BRS | L7 | Н | (5 or 6) same 4 | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/07/2 7 14:56 | | *************************************** | 0 |
| 8 | BRS | L9 | H | 8 same (expressing or expression) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/07/2 7 14:58 | | | 0 |
| م | BRS | L10 | Н | 8 same (genetic adj construct) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/07/2 7 14:58 | | *************************************** | 0 |
| 10 | BRS | L8 | 19 | (1 or 2 or 3) same (4 or 5 or 6) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/07/2 7 15:09 | | | 0 |
| 11 | BRS | L11 | 926 | targeting adj moiety | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/07/2 7 15:09 | | | 0 |
| 12 | BRS | L12 | 20 | (1 or 2 or 3) same 11 | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2002/07/2 7 15:10 | | | 0 |

(FILE 'HOME' ENTERED AT 15:13:59 ON 27 JUL 2002)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT

15:14:25 ON 27 JUL 2002

- L1 1256 S CLOSTRIDIAL (W) (NEUROTOXIN OR TOXIN)
- L2 16906 S BOTULINUM TOXIN
- L3 0 S CLOSTRIDIAL (W) (BERATTI OR BUTYRICUM OR TATANI)
- L4 1 S CLOSTRIDIAL (W) (BERATTI OR BUTYRICUM OR TETANI)
- L5 17834 S L1 OR L2 OR L4
- L6 607 S (TARGET? MOIETY) OR (TRANSMISSION COMPOUND)
- L7 94664 S SUBSTANCE P
- L8 53 S L5 (P) (L6 OR L7)
- L9 24 DUPLICATE REMOVE L8 (29 DUPLICATES REMOVED)
- L10 14 S L8 (P) (EXPRESS? OR RECOMBINANT OR GENETIC CONSTRUCT)
- L11 3 DUPLICATE REMOVE L10 (11 DUPLICATES REMOVED)
- L12 21 S L9 NOT L11

 $=> \log y$

=> d his

(FILE 'HOME' ENTERED AT 15:27:42 ON 27 JUL 2002)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT

15:28:13 ON 27 JUL 2002

- L1 17833 S (CLOSTRIDIAL TOXIN) OR (CLOSTRIDIAL NEUROTOXIN) OR (BOTULINUM
- L2 94674 S (SUBSTANCE P) OR (TRANSMISSION COMPOUND)
- L3 4 S L1 (P) L2 (P) (CONJUGATE OR FUSION PROTEIN)
- L4 4 DUPLICATE REMOVE L3 (0 DUPLICATES REMOVED)

 $=> \log y$

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FILE 'HOME' ENTERED AT 15:13:59 ON 27 JUL 2002
=> file medline caplus biosis embase scisearch agricola
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                                                 SINCE FILE
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FULL ESTIMATED COST
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FILE 'CAPLUS' ENTERED AT 15:14:25 ON 27 JUL 2002
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FILE 'AGRICOLA' ENTERED AT 15:14:25 ON 27 JUL 2002
=> s clostridial (w) (neurotoxin or toxin)
          1256 CLOSTRIDIAL (W) (NEUROTOXIN OR TOXIN)
=> s botulinum toxin
        16906 BOTULINUM TOXIN
=> s clostridial (w) (beratti or butyricum or tatani)
             O CLOSTRIDIAL (W) (BERATTI OR BUTYRICUM OR TATANI)
=> s clostridial (w) (beratti or butyricum or tetani)
             1 CLOSTRIDIAL (W) (BERATTI OR BUTYRICUM OR TETANI)
=> s l1 or l2 or l4
         17834 L1 OR L2 OR L4
=> s (target? moiety) or (transmission compound)
           607 (TARGET? MOIETY) OR (TRANSMISSION COMPOUND)
=> s substance P
        94664 SUBSTANCE P
L7
```

=> s 15 (p) (16 or 17) 53 L5 (P) (L6 OR L7) => duplicate remove 18

DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH' KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n PROCESSING COMPLETED FOR L8 24 DUPLICATE REMOVE L8 (29 DUPLICATES REMOVED)

=> s 18 (p) (express? or recombinant or genetic construct) 14 L8 (P) (EXPRESS? OR RECOMBINANT OR GENETIC CONSTRUCT) L10

=> duplicate remove 110 DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH' KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n PROCESSING COMPLETED FOR L10 3 DUPLICATE REMOVE L10 (11 DUPLICATES REMOVED) L11

=> d l11 1-3 ibib abs

L11 ANSWER 1 OF 3 MEDLINE DUPLICATE 1 ACCESSION NUMBER: 2001325272 MEDLINE

DOCUMENT NUMBER: 21218317 PubMed ID: 11320861

TITLE: [Botulinum toxin A for the treatment of headache disorders and pericran: pain syndromes).
Botulinum-Tox A in der Therapie von

Kopfschmerzerkrankungen und perikranialen Schmerzsyndromen.

Gobel H; Heinze A; Heinze-Kuhn K; Austermann K AUTHOR:

Neurologisch-verhaltensmedizinische Schmerzklinik Kiel in CORPORATE SOURCE:

Kooperation mit der Universitat Kiel, Heikendorfer Weg

9-27, 24149 Kiel.. kiel@Schmerzklinik.de

SOURCE: NERVENARZT, (2001 Apr) 72 (4) 261-74. Ref: 104

> Journal code: 0400773. ISSN: 0028-2804. Germany: Germany, Federal Republic of

Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

(REVIEW, TUTORIAL)

LANGUAGE: German

PUB. COUNTRY:

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200106

ENTRY DATE: Entered STN: 20010611

Last Updated on STN: 20010611 Entered Medline: 20010607

toxin A has been used for the AB For 20 years ***botulinum*** treatment of a variety of disorders characterised by pathologically increased muscle contraction. Recently, treatment of tension headache, migraine, cluster headache, and myofascial pain syndromes of neck, ***botulinum*** ***toxin*** shoulder girdle, and back with become a rapidly expanding new field of research. Several modes of action are discussed for these indications. The blockade of cholinergic innervation reduces muscular hyperactivity for 3 to 6 months. Degenerative changes in the musculoskeletal system of the head and neck are prevented. Nociceptive afferences and blood vessels of the pericranial muscles are decompressed and muscular trigger points and tender points are resolved. The normalisation of muscle spindle activity leads to a normalisation of muscle tone and central control mechanisms of muscle activity. Oromandibular dysfunction is eliminated and muscular stress removed. However, the effect of ***botulinum*** ***toxin*** A cannot be explained by muscular actions only. Its retrograde uptake into the central nervous system modulates the ***expression*** of ***substance*** ***P*** and enkephalins in the spinal cord and nucleus raphe. Recent findings suggest an inhibition of sterile inflammation which may lead to a blockade of the neurogenic inflammation believed to be the pathophysiological substrate of primary headache disorders. The efficacy

botulinum ***toxin*** A in the treatment of pain disorders is being investigated in several studies at the moment. The results and experiences obtained so far present new alternatives in the treatment of chronic pain disorders. The practical use of ***toxin*** A is demonstrated. ***botulinum***

DUPLICATE 2 L11 ANSWER 2 OF 3 MEDLINE

ACCESSION NUMBER: 2000148594 MEDLINE

DOCUMENT NUMBER: 20148594 PubMed ID: 10683301

TITLE: Enkephalin and aFGF are differentially regulated in rat

spinal motoneurons after chemodenervation with botulinum

toxin.

AUTHOR: Humm A M; Pabst C; Lauterburg T; Burgunder J M

Laboratory of Neuromorphology, University of Berne, Berne, CORPORATE SOURCE:

CH3010, Switzerland.

EXPERIMENTAL NEUROLOGY, (2000 Jan) 161 (1) 361-72.

Journal code: 0370712. ISSN: 0014-4886.

PUB. COUNTRY: United States

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

SOURCE:

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200003

ENTRY DATE: Entered STN: 20000330

> Last Updated on STN: 20000330 Entered Medline: 20000323

toxin is used to induce transient graded AB ***Botulinum*** paresis by chemodenervation in the treatment of focal hyperkinetic movement disorders. While the molecular events occurring in motoneurons after mechanical nerve lesioning leading to muscle paresis are well known, they have been investigated to a lesser extent after chemodenervation. We therefore examined the ***expression*** of enkephalin (ENK), acidic fibroblast growth factor (aFGF), neurotensin (NT), galanin (GAL),

substance ***P** (SP), vasoactive intestinal provider (VIP), and neuropeptide Y (N) in rat spinal motoneurons aft (SP), vasoactive intestinal polypeptide chemodenervation of the gastrocnemius. In order to precisely localize the motoneurons targeting the injection site, retrograde tracing was performed in additional rats by using Fluorogold injections. ENK ***expression*** was upregulated in the region corresponding to the Fluorogold positive motoneurons, but also on the contralateral side and in more distant parts of the spinal cord. The highest upregulation occurred 7 to 14 days after injections and decreased over a period of three months. At 8 days, aFGF was slightly downregulated in all regions studied, single motoneurons ***expression*** , while ***expression*** of GAL, SP, VIP, and NPY could be detected neither in controls nor in toxin-treated animals. These alterations in gene ***expression*** were strikingly different from those described after axotomy. Our present findings give additional demonstration of the considerable plasticity of the adult ***toxin*** treatment. spinal cord after ***botulinum*** Copyright 2000 Academic Press.

L11 ANSWER 3 OF 3 MEDLINE DUPLICATE 3

ACCESSION NUMBER: 97078373 MEDLINE

DOCUMENT NUMBER: 97078373 PubMed ID: 8919297

TITLE: Effect of muscle denervation on the expression of substance

P in the ventral raphe-spinal pathway of the rat.

AUTHOR: Van den Bergh P; De Beukelaer M; Deconinck N

CORPORATE SOURCE: Laboratoire de Biologie Neuromusculaire, Service de

Neurologie, Cliniques Universitaires St-Luc, Universite de

Louvain, Brussels, Belgium.

SOURCE: BRAIN RESEARCH, (1996 Jan 29) 707 (2) 206-12.

Journal code: 0045503. ISSN: 0006-8993.

PUB. COUNTRY: Netherlands

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199703

ENTRY DATE: Entered STN: 19970407

Last Updated on STN: 20000407 Entered Medline: 19970327

AB The medullary raphe nuclei, wherein serotonin (5-HT) coexists with ***P*** (SP) and thyrotropin-releasing hormone ***substance*** (TRH), innervate lower motor neurons in the spinal cord ventral horn by means of the ventral raphe-spinal pathway. Destruction of the ventral raphe-spinal pathway is associated with deficient recovery of denervated muscle, indicating that it may exert a trophic effect upon lower motor neurons. To determine whether SP could be a trophic factor for lower motor neurons within the ventral raphe-spinal pathway, the effect of muscle ***toxin*** type A on SP-encoding ***botulinum*** denervation with beta-preprotachykinin mRNA in the rat medullary raphe was examined by in situ hybridization histochemistry. Silver grain density over hybridized medullary raphe neurons was increased by up to 11%, although the number of hybridized neurons did not change in denervated as compared to control rats. Increased SP gene ***expression*** in the medullary raphe in response to motor unit lesioning suggests that raphe-spinal SP may be trophic to lower motor neurons.

=> d his

L1

L2

L3

L4

L5

L6 L7

L8 L9 (FILE 'HOME' ENTERED AT 15:13:59 ON 27 JUL 2002)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 15:14:25 ON 27 JUL 2002

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1256 S CLOSTRIDIAL (W) (NEUROTOXIN OR TOXIN)
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16906 S BOTULINUM TOXIN

O S CLOSTRIDIAL (W) (BERATTI OR BUTYRICUM OR TATANI)

1 S CLOSTRIDIAL (W) (BERATTI OR BUTYRICUM OR TETANI)

17834 S L1 OR L2 OR L4

607 S (TARGET? MOIETY) OR (TRANSMISSION COMPOUND)

94664 S SUBSTANCE P

53 S L5 (P) (L6 OR L7)

24 DUPLICATE REMOVE L8 (29 DUPLICATES REMOVED)

L10 14 S L8 (P) (EXPRESS? OR RECOMBINANT OR GENETIC CONSTRUCT)

L11 3 DUPLICATE REMOVE L10 (11 DUPLICATES REMOVED)

=> s 19 not 111

L12 21 L9 NOT L11

=> d l12 1-21 ibib abs

L12 ANSWER 1 OF 21 MEDLINE

ACCESSION NUMBER: 2002216275 IN-PROCESS DOCUMENT NUMBER: 21948777 PubMed ID: 11952288

TITLE: Adjuvant botulinum toxin A in dyshidrotic hand eczema: a

controlled prospective pilot study with left-right

comparison.

AUTHOR: Wollina U; Karamfilov T

CORPORATE SOURCE: Department of Dermatology and Allergology, the

Friedrich-Schiller-University of Jena, Germany...

Wollina-Uw@khdf.de

SOURCE: JOURNAL OF THE EUROPEAN ACADEMY OF DERMATOLOGY AND

VENEREOLOGY, (2002 Jan) 16 (1) 40-2. Journal code: 9216037. ISSN: 0926-9959.

PUB. COUNTRY: Netherlands

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: IN-PROCESS; NONINDEXED; Priority Journals

ENTRY DATE: Entered STN: 20020416

Last Updated on STN: 20020416

OBJECTIVE: Dyshidrotic hand eczema is a therapeutic challenge. A AB prospective pilot study was performed with left-right comparison in order to investigate whether chemical de-innervation of sudoriferic nerves would be superior to standard therapy with topical corticosteroids. BACKGROUND: ***toxin*** A (BTXA) is a potent inhibitor of ***Botulinum*** acetylcholine release, that induces eccrine sweat production and release. Inhibition of sweating by other measures such as tap water iontophoresis has been shown to be beneficial in dyshidrotic hand eczema. METHODS: Eight adult patients suffering from dyshidrotic hand eczema (atopic type) were included in a prospective, side-by-side controlled clinical pilot study using topical corticosteroids on both hands in combination with intracutaneous injections of 100 units of BTXA (Botox) on the more severely affected hand on day 1. The dyshidrotic hand eczema was classified using the DASI (Dyshidrotic Eczema Area and Severity Index) before treatment (0), after 1 week, 4 weeks and 8 weeks. RESULTS: Six patients completed the study, two dropped out because of social and personal reasons. The mean DASI score changed from 28 to17 with topical therapy alone and from 36 to 3 with adjuvant BTXA (P < 0.01). Itching and vesiculation were inhibited earlier when using the combination of corticosteroids and BTXA. There was one relapse in the corticosteroid group. Relapses have not been seen in the BTXA group. CONCLUSIONS: Interruption of sweating by BTXA improves the outcome and reduces relapses in patients with dyshidrotic hand eczema. BTXA is antipruritic as well suggesting that it does not only interact with acetylcholine release but

L12 ANSWER 2 OF 21 MEDLINE

substance

ACCESSION NUMBER: 2001680312 MEDLINE

DOCUMENT NUMBER: 21583314 PubMed ID: 11727162

P

TITLE: [Early pain reduction in the treatment of spasticity after

a single injection of botulinum A toxin].

Fruhe Schmerzreduktion in der Therapie von Spastik nach

einmaliger Botulinustoxin-A-Injektion.

AUTHOR: Chalkiadaki A; Rohr U P; Hefter H

CORPORATE SOURCE: Neurologische Klinik, Heinrich-Heine-Universitat,

Dusseldorf.. chalkiadaki@med.uni-duesseldorf.de

SOURCE: DEUTSCHE MEDIZINISCHE WOCHENSCHRIFT, (2001 Nov 30) 126 (48)

1361-4.

Journal code: 0006723. ISSN: 0012-0472. Germany: Germany, Federal Republic of

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: German

PUB. COUNTRY:

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200201

ENTRY DATE: Entered STN: 20011203

Last Updated on STN: 20020125 Entered Medline: 20020107 HISTORY, ADMISSION FINDINGS of DIAGNOSIS: After stem-cell transplantation a 45-year-old woman (case 1) and an attack of general hypoxia equiring resuscitation. She then developed a quadriplegia and spasticity of all limbs notably of the right arm and a severe pain syndrome which had to be treated by oral and intravenous analgesics. Immobilisation and secondary complications aggravated the already difficult situation. In the 2nd case a 66-year-old woman was admitted to our outpatient clinic with long-standing left-sided spastic hemiparesis after territorial infarction of the right middle cerebral artery. Beside the spasticity she also suffered from a distinct pain syndrome which did not respond to any oral analgesics. TREATMENT AND COURSE: For the treatment of the main symptoms, both patients received intramuscular injections of 1000 MU

botulinum ***toxin*** A (Dysport(R) Ipsen Pharma).

Astonishingly, both patients experienced pain relief the next day, whereas spasticity started to respond only 5-6 days later. CONCLUSIONS: In our experience pain relief after ***botulinum*** ***toxin*** A injections occurs not only due to reduced muscle hyperactivity, especially when such a temporal dissociation between pain relief and muscle relaxation appears as in the two cases reported above. Rather, we believe that ***botulinum*** ***toxin*** A interferes with the release of other neurotransmitters e. g. ***substance*** ***P*** (SP) and calcitonine-gene-related-peptide (CGRP) having a key function in the nociceptive cascade.

L12 ANSWER 3 OF 21 MEDLINE

ACCESSION NUMBER: 2001410068 MEDLINE

DOCUMENT NUMBER: 21228699 PubMed ID: 11329944

TITLE: Presynaptic effects of botulinum toxin type A on the

neuronally evoked response of albino and pigmented rabbit

iris sphincter and dilator muscles.

AUTHOR: Ishikawa H; Mitsui Y; Yoshitomi T; Mashimo K; Aoki S;

Mukuno K; Shimizu K

CORPORATE SOURCE: Department of Ophthalmology Kitasato University, School of

Medicine, 1-15-1 Kitasato, Sagamihara, 228-8555, Japan.

SOURCE: NIPPON GANKA GAKKAI ZASSHI. ACTA SOCIETATIS

OPHTHALMOLOGICAE JAPONICAE, (2001 Apr) 105 (4) 218-22.

Journal code: 7505716. ISSN: 0029-0203.

PUB. COUNTRY: Japan

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: Japanese

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200107

ENTRY DATE: Entered STN: 20010723

Last Updated on STN: 20010723 Entered Medline: 20010719

AB PURPOSE: To investigate the effects of ***botulinum*** ***toxin***
type A(botulinum A toxin) on the autonomic and other non-adrenergic,
non-cholinergic nerve terminals. METHODS: The effects of neurotoxin on
twitch contractions evoked by electrical field stimulation (EFS) were
studied in isolated rabbit iris sphincter and dilator muscles using
isometric tension recording. RESULTS: Botulinum A toxin(150 nM) inhibited
the fast cholinergic and slow ***substance*** ***P*** -ergic
component of contraction evoked by EFS in the rabbit iris sphincter muscle
without affecting the response to carbachol and ***substance***

P . Botulinum A toxin(150 nM) did not affect the twitch contraction evoked by EFS in the rabbit iris dilator muscle. CONCLUSION: These data indicated that botulinum A toxin may inhibit not only the acetylcholine release in the cholinergic nerve terminals, but also ***substance***

P release from the trigeminal nerve terminals of the rabbit iris sphincter muscle. However, neurotoxin has little effect on the adrenergic nerve terminals of the rabbit iris dilator muscle.

L12 ANSWER 4 OF 21 MEDLINE

ACCESSION NUMBER: 2001325277 MEDLINE

DOCUMENT NUMBER: 21218322 PubMed ID: 11320866

TITLE: [Reduction of pain and muscle spasms by botulinum toxin A].

Reduktion von Schmerzen und Muskelanspannung durch

Botulinum-Toxin A.

AUTHOR: Kelm S; Gerats G; Chalkiadaki A; Hefter H

CORPORATE SOURCE: Neurologische Klinik der Heinrich-Heine-Universitat

Dusseldorf, Moorenstr. 5, 40225 Dusseldorf..

Stefan.Kelm@uni-duesseldorf.de

SOURCE: '

NERVENARZT, (101 Apr.) 72 (4) 302-6. Journal code: 400773. ISSN: 0028-2804. Germany: Germany, Federal Republic of PUB. COUNTRY:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: German

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200106

ENTRY DATE: Entered STN: 20010611

> Last Updated on STN: 20010611 Entered Medline: 20010607

toxin A (BoNT-A) develops its ***Botulinum*** AB

muscle-relaxing effect by the inhibition of acetylcholine (ACh) release. This toxin is also known to relieve muscular pain in different disorders. Conspicuously, pain in some patients responds earlier and sometimes even better than muscle tension, indicating that the effect of BoNT-A on pain is not only due to inhibition of ACh release. A questionnaire was distributed to 88 patients suffering from cervical dystonia (CD). Thirty-five completed questionnaires could be used for data analysis. After intramuscular injections of BoNT-A, patients with CD experience significant reductions in pain which sometimes occur significantly earlier than the improvements in head posture. In the iris sphincter muscle of the rabbit and in dorsal root ganglion cells (DRG) of the rat, inhibition of the release of ***substance*** ***P*** by BoNT-A has been shown experimentally, and BoNT-C has been proven to develop endopeptidase ***P*** (SP) in vitro. Findings in activity toward ***substance*** the current literature and our observations allow the conclusion that alleviation of muscle pain by BoNT-A may also be due to an effect on the release of nociceptive neuropeptides, among which SP seems to have a key function.

L12 ANSWER 5 OF 21 MEDLINE

ACCESSION NUMBER: 2000464599 MEDLINE

DOCUMENT NUMBER: 20470451 PubMed ID: 11019785

TITLE: A conjugate composed of nerve growth factor coupled to a

> non-toxic derivative of Clostridium botulinum neurotoxin type A can inhibit neurotransmitter release in vitro.

AUTHOR: Chaddock J A; Purkiss J R; Duggan M J; Quinn C P; Shone C

C; Foster K A

CORPORATE SOURCE: Centre for Applied Microbiology and Research, Porton Down,

Salisbury, Wiltshire, UK.

GROWTH FACTORS, (2000) 18 (2) 147-55. SOURCE:

Journal code: 9000468. ISSN: 0897-7194.

PUB. COUNTRY: Switzerland

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: . 200102

ENTRY DATE: Entered STN: 20010322

> Last Updated on STN: 20010322 Entered Medline: 20010202

AB Nerve growth factor (NGF) receptor binding, internalisation and transportation of NGF has been identified as a potential route of delivery for other molecules. A derivative of Clostridium botulinum neurotoxin type A (LHN) that retains catalytic activity but has significantly reduced cell-binding capability has been prepared and chemically coupled to NGF. ***clostridial*** ***neurotoxins*** potently inhibit neurotransmitter release at the neuromuscular junction by proteolysis of specific components of the vesicle docking/fusion complex. Here we report that the NGF-LHN/A conjugate, when applied to PC12 cells, significantly inhibited neurotransmitter release and cleaved the type A toxin substrate. This work represents the successful use of NGF as a ***targeting*** ***moiety*** for the delivery of a neurotoxin fragment.

L12 ANSWER 6 OF 21 MEDLINE

2000181909 ACCESSION NUMBER: MEDLINE

DOCUMENT NUMBER: 20181909 PubMed ID: 10715374

TITLE: Presynaptic effects of botulinum toxin type A on the

neuronally evoked response of albino and pigmented rabbit iris sphincter and dilator muscles.

AUTHOR: Ishikawa H; Mitsui Y; Yoshitomi T; Mashimo K; Aoki S;

Mukuno K; Shimizu K

CORPORATE SOURCE: Department of Ophthalmology, Kitasato University, School of

Medicine, Sagaihara, Japan.

JAPANESE JOUR L OF OPHTHALMOLOGY, (2000 Mar-A 44 (2)) SOURCE:

Journal code: 0044652. ISSN: 0021-5155.

PUB. COUNTRY: United States

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

Priority Journals FILE SEGMENT:

ENTRY MONTH: 200006

ENTRY DATE: Entered STN: 20000616

> Last Updated on STN: 20000616 Entered Medline: 20000606

PURPOSE: To investigate the effects of ***botulinum*** type A (botulinum A toxin) on the autonomic and other nonadrenergic, noncholinergic nerve terminals. METHODS: The effects of botulinum A toxin on twitch contractions evoked by electrical field stimulation (EFS) were studied in isolated albino and pigmented rabbit iris sphincter and dilator muscles using the isometric tension recording method. RESULTS: Botulinum A toxin inhibited the fast cholinergic and slow ***substance***

P -ergic component of the contraction evoked by EFS in the rabbit iris sphincter muscle without affecting the response to carbachol and ***substance*** ***P*** . These inhibitory effects were more marked in the albino rabbit than in the pigmented rabbit. Botulinum A toxin (150 nmol/L) did not affect the twitch contraction evoked by EFS in the rabbit iris dilator muscle. CONCLUSIONS: These data indicated that botulinum A toxin may inhibit not only the acetylcholine release in the cholinergic ***substance*** ***P*** nerve terminals, but also release from the trigeminal nerve terminals of the rabbit iris sphincter muscle. However, the neurotoxin has little effect on the adrenergic nerve terminals of the rabbit iris dilator muscle. Furthermore, the botulinum A toxin binding to the pigment melanin appears to influence the response quantitatively in the two types of irides.

L12 ANSWER 7 OF 21 MEDLINE

ACCESSION NUMBER: 82048151 MEDLINE

DOCUMENT NUMBER: 82048151 PubMed ID: 7296370

TITLE: BaCl2-induced contractions in the guinea pig ileum

longitudinal muscle: role of presynaptic release of neurotransmitters and Ca2+ translocation in the

postsynaptic membrane.

AUTHOR: Clement J G

SOURCE: CANADIAN JOURNAL OF PHYSIOLOGY AND PHARMACOLOGY, (1981 Jun)

59 (6) 541-7.

Journal code: 0372712. ISSN: 0008-4212.

PUB. COUNTRY: Canada

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198201

ENTRY DATE: Entered STN: 19900316

> Last Updated on STN: 19970203 Entered Medline: 19820109

Early studies indicated that the baCl2-induced contractions in the guinea AB pig ileum longitudinal muscle strip (GPI-LMS) were, in part, neuronal in origin. However, recent studies have suggested that BaCl2-induced contractions were produced by an action directly on the smooth muscle membrane. The purpose of this study was to investigate the mechanism of the BaCl2 contractions in the GPI-LMS. ***Botulinum*** $(5 \times 10(5) \text{ MLD/mL})$, which blocks the electrically induced release of acetylcholine (ACh), hemicholinium-3 (HC-3; 110 micro M), which blocks ACh synthesis, tetrodotoxin (TTX; 60 nM), which blocks Na+ channels, black widow spider venom, which depletes the presynaptic neuron of neurotransmitter, and atropine (2.9 micro M), a potent muscarinic antagonist, had no effect on the BaCl2 contractions. Densensitization of the GPI-LMS to ***substance*** ***P*** did not affect the BaCl2 contraction. In Ca2+ -free buffer the BaCl2 dose-response curve was shifted to the right. In Ca2+-free solution the time to 50% inhibiton of the contractile response to ACh (73 nM) and BaCl2 (1.16 mM) was 3.7 and 125 min, respectively. The D 600 Ic50 for ACh and BaCl2 contractions was 220 and 130 nM, respectively. In Ca2+-free buffer either EGTA (0.53 mM) or D 600 (1 micro M) were potent inhibitors of BaCl2 contractions. These results suggest that in the GPI-LMS the BaCl2 response is not mediated by

a release of ACh (or ***systance*** ***P***) because inhibitors of ACh release, synthesis, a receptors do not affect the reconses. Also, the BaCl2 contraction is not due to activation of Na+ channels because TTX is without effect. The BaCl2-induced contraction appears to be mainly due to the movement of membrane bound Ca2+ through D 600 sensitive Ca2+ channels with extracellular Ca2+ and possible passage of Ba2+ ions intracellularly playing relatively minor roles.

L12 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:403839 CAPLUS

DOCUMENT NUMBER: 136:395977

TITLE: Clostridial toxin derivatives able to modify

peripheral sensory afferent functions

INVENTOR(S): Foster, Keith Alan; Duggan, Michael John; Shone,

Clifford Charles

PATENT ASSIGNEE(S): The Speywood Laboratory, Ltd., UK; Microbiological

Research Authority

SOURCE: U.S., 18 pp., Cont.-in-part of U.S. Ser. No. 945,037.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

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APPLICATION NO. DATE
    PATENT NO.
                   KIND DATE
    ______
                                        ______
                          20020528 US 1999-447356 19991122
19961024 WO 1996-GB916 19960416
    US 6395513 B1 20020528
WO 9633273 A1 19961024
        W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
            ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT,
            LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
            SG, SI
        RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
            IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN
                    A 19991123
                                        US 1998-945037 19980112
    US 5989545
                                      GB 1995-8204 A 19950421
PRIORITY APPLN. INFO.:
                                      WO 1996-GB916
                                                     A2 19960416
                                      US 1998-945037 A2 19980112
```

AB The invention discloses an agent specific for peripheral sensory afferents. The agent may inhibit the transmission of signals between a primary sensory afferent and a projection neuron by controlling the release of at least one neurotransmitter or neuromodulator from the primary sensory afferent. The agent may be used in or as a pharmaceutical for the treatment of pain, particularly chronic pain. Agents of the invention include a modified ***clostridial*** ***neurotoxin*** fused to a ***targeting*** ***moiety***. Prepn. and biol. testing of a conjugate of NGF with the LHN fragment of botulinum neurotoxin A are included.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:241331 CAPLUS

DOCUMENT NUMBER: 136:273210

TITLE: Clostridial toxin derivatives and methods for treating

pain

INVENTOR(S):
Donovan, Stephen

PATENT ASSIGNEE(S): Allergan Sales, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 20 pp., Cont.-in-part of U.S.

Ser. No. 625,098. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

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PATENT NO. KIND DATE APPLICATION NO. DATE

US 2002037833 A1 20020328 US 2001-922093 20010803

PRIORITY APPLN. INFO.: US 2000-489667 A2 20000119

US 2000-625098 A2 20000725
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AB Agents for treating pain, methods for producing the agents and methods for

treating.pain by administration to a patient of a therapeutically effective amt. of the agent disclosed. The agent can indule a ***clostridial*** ***neurotoxin*** , or a component or fragment or deriv. thereof, attached to a ***targeting*** ***moiety*** ***moiety*** is selected from a group ***targeting*** wherein the consisting of ***transmission*** ***compds*** . which can be released from neurons upon the transmission of pain signals by the neurons, and compds. substantially similar to the ***transmission*** . The agent comprises a ***botulinum*** ***compds*** component covalently coupled to ***substance*** ***P*** L12 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2002 ACS 2002:89857 CAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 136:145260 Clostridial toxin derivatives and methods for treating TITLE: pain INVENTOR(S): Donovan, Stephen Allergan Sales, Inc., USA PATENT ASSIGNEE(S): PCT Int. Appl., 67 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: 3 PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE ----- ---- ----WO 2002007759 A2 20020131 WO 2001-US21984 20010712 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: US 2000-625098 A 20000725 Methods for treating a bone tumor, in particular pain assocd. with bone tumor, by administration to a patient of a therapeutically effective amt. of an agent are disclosed. The agent may include a ***clostridial*** ***neurotoxin*** component attached to a ***targeting*** ***moiety*** , wherein the ***targeting*** ***moiety*** selected from the group consisting of ***transmission*** ***compds*** . which can be released from neurons upon the transmission of pain signals by the neurons, and compds. substantially similar to the ***transmission*** ***compds*** L12 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2002 ACS 2001:762800 CAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 135:322726 A pharmaceutical composition containing a nicotine TITLE: receptor agonist and an analgesic for treatment of acute, chronic pain and/or neuropathic pain and migraines Coe, Jotham Wadsworth; Harrigan, Edmund Patrick; INVENTOR(S): O'Neill, Brian Thomas; Sands, Steven Bradley; Watsky, Eric Jacob PATENT ASSIGNEE(S): Pfizer Products Inc., USA SOURCE: PCT Int. Appl., 41 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: KIND DATE PATENT NO. APPLICATION NO. DATE ----------WO 2001076576 A2 20011018 WO 2001-IB391 20010316

WO 2001076576 AZ 20011018 WO 2001-1B391 20010310
WO 2001076576 A3 20020620
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,

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HR, HU, ID, IL, IN, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MK, MN, MW, MX, MZ, NO, NZ, F PT, RO,
             RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
             VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 2001036943
                      A1
                            20011101
                                          US 2000-740307
                                        US 2000-195738P P 20000407
PRIORITY APPLN. INFO.:
     Oral, parenteral or transdermal compns. are disclosed for the treatment of
     acute, chronic and/or neuropathic pain. The pharmaceutical compns. are
     comprised of a therapeutically effective combination of a nicotine
     receptor partial agonist and an analgesic agent and a pharmaceutically
     acceptable carrier. The analgesic agent is selected from opioid
     analgesics, NMDA antagonists,
                                     ***substance***
                                                         ***P***
     COX 1 and COX 2 inhibitors, tricyclic antidepressants (TCA), selective
     serotonin reuptake inhibitors (SSRI), capsaicin receptor agonists,
     anesthetic agents, benzodiazepines, skeletal muscle relaxants, migraine
     therapeutic agents, anticonvulsants, antihypertensives, antiarrhythmics,
     antihistamines, steroids, caffeine, N-type calcium channel antagonists and
       ***botulinum***
                           ***toxin*** . The method of using these compds. and
     a method of treating acute, chronic and/or neuropathic pain and migraine
     in a mammal including a human is also disclosed.
L12 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                         2001:545729 CAPLUS
DOCUMENT NUMBER:
                         135:132453
TITLE:
                           ***Clostridial***
                                                 ***neurotoxin***
                                                                    derivatives
                         attached to ***targeting***
                                                           ***moieties***
                         and methods using them for treating pain
INVENTOR(S):
                         Donovan, Stephen
PATENT ASSIGNEE(S):
                         Allergan Sales, Inc., USA
SOURCE:
                         PCT Int. Appl., 76 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                    KIND DATE
                                          APPLICATION NO. DATE
                                         WO 2001-US1529
     WO 2001053336
                     A1
                            20010726
                                                            20010117
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 2002068699
                      A1
                          20020606
                                         US 2001-938112 20010823
PRIORITY APPLN. INFO.:
                                        US 2000-489667 A 20000119
     The invention provides agents for treating pain, methods for producing the
     agents, and methods for treating pain by administration to a patient of a
     therapeutically effective amt. of the agent. The agent can include a
       ***clostridial***
                           ***neurotoxin*** , or a component of fragment or
     deriv. thereof, attached to a ***targeting*** ***moiety***
                  ***targeting***
     wherein the
                                       ***moiety*** is selected from
                             ***compds*** . which can be released from neurons
       ***transmission***
     upon the transmission of pain signals by the neurons, and compds.
     substantially similar to the ***transmission***
                                                        ***compds***
REFERENCE COUNT:
                               THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L12 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                         2001:228744 CAPLUS
DOCUMENT NUMBER:
                         134:247267
TITLE:
                         Clostridial neurotoxin targeted conjugates for
                         inhibition of secretion from non-neuronal cells
INVENTOR (S):
                         Foster, Keith Alan; Chaddock, John Andrew; Purkiss,
```

John Robert; Quinn, Conrad Padraig

Microbio gical Research Authority, UK PCT Int. ppl., 63 pp. PATENT ASSIGNEE(S):

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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KIND DATE
    PATENT NO.
                                        APPLICATION NO. DATE
    WO 2001021213 A2 20010329 WO 2000-GB3669 20000925
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
            HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
            LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
            SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
            ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
            CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                      GB 1999-22554 A 19990923
PRIORITY APPLN. INFO.:
```

A method of treatment of disease by inhibition of cellular secretory processes is provided. The method has particular application in the treatment of diseases dependent on the exocytotic activity of endocrine cells, exocrine cells, inflammatory cells, cells of the immune system, cells of the cardiovascular system, and bone cells. Agents and compns. therefor, as well as methods for manufg. these agents and compns., are provided. In a preferred embodiment a ***clostridial***

neurotoxin , substantially devoid of holotoxin binding affinity for neuronal cells of the presynaptic muscular junction, is assocd. with a

moiety is selected such that the ***clostridial***

toxin conjugate so formed may be directed to a non-neuronal target cell to which the conjugate may bind. Following binding, a neurotoxin component of the conjugate, which is capable of inhibition of cellular secretion, passes into the cytosol of the target cell by cellular internalization mechanisms. Thereafter, inhibition of secretion from the target cell is effected.

L12 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2000:323250 CAPLUS

DOCUMENT NUMBER: 132:303493

TITLE: Application of botulinum toxin to the management of

neurogenic inflammatory disorders

INVENTOR(S): First, Eric R.

PATENT ASSIGNEE(S): USA

U.S., 7 pp. SOURCE: CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ---------US 1997-923884 19970904 US 6063768 A 20000516 PRIORITY APPLN. INFO.: US 1996-20400P P 19960906

A method is provided for the use of at least one serotype or a combination of serotypes of botulinum neurotoxin either alone or in combination with other peptides or fusion proteins, that when administered in a safe and effective amt., antagonize and therefore decrease or block inflammation induced by the neurogenic mechanisms underlying or assocd. with inflammatory disorders, in particular, arthritis.

REFERENCE COUNT: THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS 10 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:249106 CAPLUS

DOCUMENT NUMBER: 130:276767

TITLE: Conjugates of galactose-binding lectins and

clostridial neurotoxins as analgesics

INVENTOR (S): Duggan, Michael John; Chaddock, John Andrew

The Spey od Laboratory Limited, UK; Microbiological Research athority PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                   KIND DATE
                                       APPLICATION NO. DATE
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                                        WO 1998-GB3001
    WO 9917806
                    A1
                          19990415
                                                        19981007
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE,
            KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
            MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
            TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
            CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    CA 2306350
                    AA 19990415
                                       CA 1998-2306350 19981007
    AU 9893574
                     A1
                          19990427
                                       AU 1998-93574
                                                        19981007
                          20011129
    AU 741456
                     B2
    ZA 9809138
                    Α
                          19990527
                                        ZA 1998-9138
                                                       19981007
                                       EP 1998-946571 19981007
    EP 996468
                     A1
                          20000503
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
    JP 2001518522
                     T2
                          20011016
                                        JP 2000-514674
                                                        19981007
PRIORITY APPLN. INFO.:
                                     GB 1997-21189
                                                    A 19971008
                                     WO 1998-GB3001
                                                    W 19981007
    A class of novel agents that are able to modify nociceptive afferent
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function is provided. The agents may inhibit the release of neurotransmitters from discrete populations of neurons and thereby reduce or preferably prevent the transmission of afferent pain signals from peripheral to central pain fibers. They comprise a galactose-binding lectin linked to a deriv. of a clostridial neurotoxin. The deriv. of the clostridial neurotoxin comprises the L-chain, or a fragment thereof, which includes the active proteolytic enzyme domain of the light (L) chain, linked to a mol. or domain with membrane-translocating activity. The agents may be used in or as pharmaceuticals for the treatment of pain, particularly chronic pain.

REFERENCE COUNT: THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 16 OF 21 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1997:615391 CAPLUS

DOCUMENT NUMBER: 127:288483

TITLE: Capsaicin stimulates release of substance P from

dorsal root ganglion neurons via two distinct

mechanisms

AUTHOR (S): Purkiss, John R.; Welch, Mary J.; Doward, Sarah;

Foster, Keith A.

CORPORATE SOURCE: CAMR (Centre of Applied Microbiology and Research),

Salisbury, Wiltshire, SP4 0JG, UK

SOURCE: Biochemical Society Transactions (1997), 25(3), 542S

CODEN: BCSTB5; ISSN: 0300-5127

PUBLISHER: Portland Press

DOCUMENT TYPE: Journal LANGUAGE: English

In this report, the authors describe both extracellular Ca2+-dependent and -independent mechanisms of capsaicin-induced release of ***substance***

from cultured embryonic rat dorsal root ganglion neurons.

Further, the authors describe the differing ***botulinum***

toxin A sensitivity of these two mechanisms. Rat dorsal root ganglion neurons (DRGs) were prepd. from 14-16 days gestation embryos. Release of ***substance*** ***P*** was measured and then total

was measured following capsaicin or KCl stimulation in the absence of Ca2+ and in the presence of Ca2+.

Substance ***P*** immunoreactivity was measured using an enzyme immunoassay kit. Botulinum neurotoxin (BoNT/A) cleavage of SNAP-25 was measured in cells following 18-20 h exposure to toxin. From the results the authors found that capsaicin is able to evoke release of

substance ***P** from DRGs by two mechanisms. The first mechanism is Ca2+-dependent, eximally stimulated by 0.3.mu.M psaicin and requires intact SNAP-25 for optimum release. The second mechanism is Ca2+-independent, becomes activated at 3-10.mu.M capsaicin and is insensitive to BoNT/A so it induces release through a mechanism that does not have SNAP-25 as an essential component.

L12 ANSWER 17 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 2001:251745 BIOSIS DOCUMENT NUMBER: PREV200100251745

TITLE: Neuronal plasticity in various neuropathic pain model mice.

AUTHOR(S): Ueda, Hiroshi (1)

CORPORATE SOURCE: (1) Department of Molecular Pharmacology and Neuroscience,

Nagasaki University School of Pharmaceutical Sciences,

Nagasaki Japan

SOURCE: Neuroscience Research Supplement, (2000) No. 24, pp. S7.

print.

Meeting Info.: 23rd Annual Meeting of the Japan

Neuroscience Society and the 10th Annual Meeting of the Japanese Neural Network Society Yokohama, Japan September

04-06, 2000 ISSN: 0921-8696.

DOCUMENT TYPE: Conference LANGUAGE: English SUMMARY LANGUAGE: English

L12 ANSWER 18 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 2000:256755 BIOSIS DOCUMENT NUMBER: PREV200000256755

TITLE: Enhanced ***Substance*** ***P*** response of

esophageal sphincter.

AUTHOR(S): Gaumnitz, Eric A. (1); Bass, Paul; Osinski, Mark A.

CORPORATE SOURCE: (1) Univ of Wisconsin Med Sch, Madison, WI USA

SOURCE: Gastroenterology, (April, 2000) Vol. 118, No. 4 Suppl. 2

Part 1, pp. A154. print..

Meeting Info.: 101st Annual Meeting of the American

Gastroenterological Association and the Digestive Disease Week. San Diego, California, USA May 21-24, 2000 American

Gastroenterological Association

. ISSN: 0016-5085.

DOCUMENT TYPE: Conference LANGUAGE: English SUMMARY LANGUAGE: English

L12 ANSWER 19 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 1976:180040 BIOSIS

DOCUMENT NUMBER: BA62:10040

TITLE: CONTRACTION AND RELAXATION OF THE RETRACTOR PENIS MUSCLE

AND PENILE ARTERY OF THE BULL A STUDY OF EFFECTS OF DRUGS AND TRANS MURAL NERVE STIMULATION ON ISOLATED SMOOTH MUSCLE

STRIPS.

AUTHOR(S): KLINGE E; SJOSTRAND N O

SOURCE: ACTA PHYSIOL SCAND SUPPL, (1974 (RECD 1975)) (420), 1-88.

CODEN: APSSAD. ISSN: 0302-2994.

FILE SEGMENT: BA; OLD LANGUAGE: Unavailable

The effects of field stimulation and various endogenous compounds and drugs on autonomic nerves or receptors were investigated on isolated strips of the retractor penis muscle and the penile artery of the bull. Excitatory and inhibitory responses to field stimulation and secondary contraction were abolished by tetrodotoxin or local anesthetic drugs. The excitatory response to field stimulation was inhibited or abolished by .alpha.-adrenoceptor and adrenergic neuron blocking agents and was enhanced by inhibitors of neuronal noradrenaline uptake. Noradrenaline and adrenaline contracted the retractor penis and the penile artery. This effect was abolished by .alpha.-adrenoceptor blocking agents. After .alpha.-receptor blockade adrenaline, noradrenaline and isoprenaline produced relaxation which was prevented by .beta.-adrenoceptor blocking agents. The inhibitory response to field stimulation was not prevented by antimuscarinic, ganglionic blocking or neuromuscular blocking drugs or counteracted by ***botulinum*** ***toxin*** or hemicholinium and

was apparently unaffected by physostigmine. It was uncovered by adrenergic neuron blocking agents. Acet choline caused contraction of the smooth muscle, suppression of the excitatory response to field stimulation and a brief relaxation sometimes preceded by a rapid contraction and resembling the effect of transmural nerve stimulation. The first 2 effects of acetylcholine were emulated by pilocarpine and prevented by antimuscarinic drugs; the 3rd effect was prevented by hexamethonium and emulated by nicotine. Nicotine-induced relaxations were prevented by ganglionic blocking agents and by local anesthetics. All acetylcholine effects, particularly the last, required high concentrations. Histamine and 5-hydroxytryptamine contracted both penis and artery. The inhibitory response to field stimulation were not blocked by antihistamines or serotonin antagonists. ATP contracted the penis but relaxed the penile artery. Desensitization to ATP abolished or reversed this relaxation, but had no effect on the inhibitory response to field stimulation. No overt effects on the retractor penis and penile artery were obtained with .gamma. aminobutyric acid [GABA], glycine, glutamic acid, aspartic acid or several other amino acids. Prostaglandins (PG) E1 and E2 relaxed the retractor penis; PGF2.alpha. contracted it. All were powerful stimulants of arterial smooth muscle. Prolonged exposure to inhibitors of PG synthesis did not suppress inhibitory responses to field stimulation. Minute concentrations of bradykinin contracted the retractor penis but had almost no effect on the penile artery. ***Substance*** contracted the muscles. Posterior pituitary hormones had no overt effect on the retractor penis but contracted the penile artery.

L12 ANSWER 20 OF 21 SCISEARCH COPYRIGHT 2002 ISI (R)

ACCESSION NUMBER: 2000:530062 SCISEARCH

THE GENUINE ARTICLE: 309RU

TITLE: Enhanced ***substance*** ***P*** response of

esophageal sphincter.

AUTHOR: Gaumnitz E A (Reprint); Bass P; Osinski M A

CORPORATE SOURCE: UNIV WISCONSIN, SCH PHARM, MADISON, WI; UNIV WISCONSIN,

SCH MED, MADISON, WI; UNIV WISCONSIN, SCH PHARM, MADISON,

WI

COUNTRY OF AUTHOR: USA

SOURCE: GASTROENTEROLOGY, (APR 2000) Vol. 118, No. 4, Part 1,

Supp. [2], pp. 889-889.

Publisher: W B SAUNDERS CO, INDEPENDENCE SQUARE WEST CURTIS CENTER, STE 300, PHILADELPHIA, PA 19106-3399.

ISSN: 0016-5085.

DOCUMENT TYPE: Conference; Journal

FILE SEGMENT: LIFE; CLIN LANGUAGE: English

REFERENCE COUNT: 0

L12 ANSWER 21 OF 21 SCISEARCH COPYRIGHT 2002 ISI (R)

ACCESSION NUMBER: 1999:910001 SCISEARCH

THE GENUINE ARTICLE: 257VL

TITLE: Sensitivity of embryonic rat dorsal root ganglia neurons

to Clostridium botulinum neurotoxins

AUTHOR: Welch M J; Purkiss J R (Reprint); Foster K A

CORPORATE SOURCE: PUBL HLTH LAB SERV, CTR APPL MICROBIOL & RES, SALISBURY

SP4 0JG, WILTS, ENGLAND (Reprint); PUBL HLTH LAB SERV, CTR APPL MICROBIOL & RES, SALISBURY SP4 0JG, WILTS, ENGLAND

COUNTRY OF AUTHOR: ENGLAND

SOURCE: TOXICON, (FEB 2000) Vol. 38, No. 2, pp. 245-258.

Publisher: PERGAMON-ELSEVIER SCIENCE LTD, THE BOULEVARD,

LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND.

ISSN: 0041-0101.

DOCUMENT TYPE: Article; Journal

FILE SEGMENT: LIFE
LANGUAGE: English
REFERENCE COUNT: 34

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Clostridium botulinum neurotoxins (BoNT) are zinc dependent endopeptidases which. once internalised into the neuronal cytosol, block neurotransmission: by proteolysis of membrane-associated proteins putatively involved in synaptic vesicle docking and fusion with the plasma membrane. Although many studies have used a variety of cellular systems to study the neurotoxins, most require relatively large amounts of toxin dr

permeabilisation to internaline the neurotoxin. We present here a primary culture of embryonic rat don't root ganglia (DRG) neurons the exhibits calcium-dependent substance P secretion when depolarised with elevated extracellular potassium and is naturally BoNT sensitive. The DRG neurons showed a different IC50 for each of the toxins tested with a 1000 fold difference between the most and least potent neurotoxins (0.05, 0.3,30 and similar to 60 nM for A, C, F and B, respectively). BoNT/A cleavage of SNAP-25 was seen as early as 2 h, but substance P secretion was not significantly inhibited until 4 h intoxication and the effects of BoNT/A were observed for as long as 15 days. This primary neuronal culture system represents a new and sensitive cellular model for the ill vitro study of the botulinum neurotoxins. (C) 1999 Elsevier Science Ltd. All rights reserved.

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L1L2

L3

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L5

L6 L7

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L12

(FILE 'HOME' ENTERED AT 15:13:59 ON 27 JUL 2002)

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FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     15:14:25 ON 27 JUL 2002
          1256 S CLOSTRIDIAL (W) (NEUROTOXIN OR TOXIN)
          16906 S BOTULINUM TOXIN
              O S CLOSTRIDIAL (W) (BERATTI OR BUTYRICUM OR TATANI)
              1 S CLOSTRIDIAL (W) (BERATTI OR BUTYRICUM OR TETANI)
         17834 S L1 OR L2 OR L4
           607 S (TARGET? MOIETY) OR (TRANSMISSION COMPOUND)
         94664 S SUBSTANCE P
            53 S L5 (P) (L6 OR L7)
            24 DUPLICATE REMOVE L8 (29 DUPLICATES REMOVED)
            14 S L8 (P) (EXPRESS? OR RECOMBINANT OR GENETIC CONSTRUCT)
L10
             3 DUPLICATE REMOVE L10 (11 DUPLICATES REMOVED)
L11
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FULL ESTIMATED COST

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 82.64 | 82.85 |
| SINCE FILE | TOTAL |

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21 S L9 NOT L11

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(FILE 'HOME' ENTERED AT 15:13:59 ON 27 JUL 2002)

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15:14:25 ON 27 JUL 2002

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- L2 16906 S BOTULINUM TOXIN
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- L4 1 S CLOSTRIDIAL (W) (BERATTI OR BUTYRICUM OR TETANI)
- L5 17834 S L1 OR L2 OR L4
- L6 607 S (TARGET? MOIETY) OR (TRANSMISSION COMPOUND)
- L7 94664 S SUBSTANCE P
- L8 53 S L5 (P) (L6 OR L7)
- L9 24 DUPLICATE REMOVE L8 (29 DUPLICATES REMOVED)
- L10 14 S L8 (P) (EXPRESS? OR RECOMBINANT OR GENETIC CONSTRUCT)
- L11 3 DUPLICATE REMOVE L10 (11 DUPLICATES REMOVED)
- L12 21 S L9 NOT L11

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PRIORITY APPLN. INFO.:

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=> file medline caplus biosis embase scisearch agricola
COST IN U.S. DOLLARS
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FULL ESTIMATED COST
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FILE 'CAPLUS' ENTERED AT 15:28:13 ON 27 JUL 2002
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FILE 'AGRICOLA' ENTERED AT 15:28:13 ON 27 JUL 2002
=> s (clostridial toxin) or (clostridial neurotoxin) or (botulinum toxin)
        17833 (CLOSTRIDIAL TOXIN) OR (CLOSTRIDIAL NEUROTOXIN) OR (BOTULINUM
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=> s (substance p) or (transmission compound)
        94674 (SUBSTANCE P) OR (TRANSMISSION COMPOUND)
=> s l1 (p) l2 (p) (conjugate or fusion protein)
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PROCESSING COMPLETED FOR L3
             4 DUPLICATE REMOVE L3 (0 DUPLICATES REMOVED)
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    ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                        2002:89857 CAPLUS
DOCUMENT NUMBER:
                        136:145260
TITLE:
                        Clostridial toxin derivatives and methods for treating
                        pain
INVENTOR(S):
                        Donovan, Stephen
PATENT ASSIGNEE(S):
                        Allergan Sales, Inc., USA
SOURCE:
                        PCT Int. Appl., 67 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
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                                          -----
    WO 2002007759
                     A2 20020131
                                         WO 2001-US21984 20010712
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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            LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
            RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
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        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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Methods for treating a bone tumor, in particular pain assocd. with bone tumor, by administration to a patient of a therapeutically effective amt.

US 2000-625098 A 20000725

of an agent are disclosed. The agent may include a clostridial neurotoxin component attached to a targeting moiety, wherein the targeting moiety is selected from the group consisting of transmission compds. which can be released from neurons upon the transmission of pain signals by the neurons, and compds. substantially similar to the transmission compds.

L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:241331 CAPLUS

DOCUMENT NUMBER: 136:273210

TITLE: Clostridial toxin derivatives and methods for treating

pain

INVENTOR(S): Donovan, Stephen

PATENT ASSIGNEE(S): Allergan Sales, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 20 pp., Cont.-in-part of U.S.

Ser. No. 625,098. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 2002037833 A1 20020328 US 2001-922093 20010803

PRIORITY APPLN. INFO:: US 2000-489667 A2 20000119

US 2000-625098 A2 20000725

AB Agents for treating pain, methods for producing the agents and methods for treating pain by administration to a patient of a therapeutically effective amt. of the agent are disclosed. The agent can include a clostridial neurotoxin, or a component or fragment or deriv. thereof, attached to a targeting moiety, wherein the targeting moiety is selected from a group consisting of transmission compds. which can be released from neurons upon the transmission of pain signals by the neurons, and compds. substantially similar to the transmission compds. The agent comprises a botulinum toxin component covalently coupled to substance P.

L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:545729 CAPLUS

DOCUMENT NUMBER: 135:132453

TITLE: Clostridial neurotoxin derivatives attached to

targeting moieties, and methods using them for

treating pain
Donovan, Stephen

PATENT ASSIGNEE(S): Allergan Sales, Inc., USA SOURCE: PCT Int. Appl., 76 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

INVENTOR(S):

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PATENT NO.
                KIND DATE
                                      APPLICATION NO. DATE
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    WO 2001053336
                   A1
                         20010726
                                      WO 2001-US1529 20010117
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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           HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
           LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
           SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
           YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
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           BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                      US 2001-938112 20010823
    US 2002068699
                   A1 20020606
                                    US 2000-489667 A 20000119
PRIORITY APPLN. INFO.:
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AB The invention provides agents for treating pain, methods for producing the agents, and methods for treating pain by administration to a patient of a therapeutically effective amt. of the agent. The agent can include a clostridial neurotoxin, or a component of fragment or deriv. thereof, attached to a targeting moiety, wherein the targeting moiety is selected from transmission compds. which can be released from neurons upon the transmission of pain signals by the neurons, and compds. substantially

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similar to the transmission mpds.
                             E ARE 9 CITED REFERENCES AVAILA
                                                              FOR THIS
                   9
                         RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
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REFERENCE COUNT: ANSWER 4 OF 4 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:249106 CAPLUS DOCUMENT NUMBER: 130:276767 TITLE: Conjugates of galactose-binding lectins and clostridial neurotoxins as analgesics INVENTOR(S): Duggan, Michael John; Chaddock, John Andrew PATENT ASSIGNEE(S): The Speywood Laboratory Limited, UK; Microbiological Research Authority SOURCE: PCT Int. Appl., 50 pp. CODEN: PIXXD2 Patent DOCUMENT TYPE: LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE ----- ---------WO 9917806 A1 19990415 WO 1998-GB3001 19981007 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG CA 2306350 19990415 CA 1998-2306350 19981007 AA AU 9893574 AU 1998-93574 A1 19990427 19981007 AU 741456 B2 20011129 ZA 9809138 Α 19990527 ZA 1998-9138 19981007 EP 1998-946571 19981007 EP 996468 A1 20000503 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI JP 2001518522 T2 20011016 JP 2000-514674 19981007 PRIORITY APPLN. INFO.: GB 1997-21189 A 19971008 WO 1998-GB3001 W 19981007 A class of novel agents that are able to modify nociceptive afferent function is provided. The agents may inhibit the release of neurotransmitters from discrete populations of neurons and thereby reduce or preferably prevent the transmission of afferent pain signals from peripheral to central pain fibers. They comprise a galactose-binding lectin linked to a deriv. of a clostridial neurotoxin. The deriv. of the clostridial neurotoxin comprises the L-chain, or a fragment thereof, which includes the active proteolytic enzyme domain of the light (L) chain, linked to a mol. or domain with membrane-translocating activity. The agents may be used in or as pharmaceuticals for the treatment of pain, particularly chronic pain. REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT => d his (FILE 'HOME' ENTERED AT 15:27:42 ON 27 JUL 2002) FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 15:28:13 ON 27 JUL 2002 L1 17833 S (CLOSTRIDIAL TOXIN) OR (CLOSTRIDIAL NEUROTOXIN) OR (BOTULINUM L2 94674 S (SUBSTANCE P) OR (TRANSMISSION COMPOUND) L3 4 S L1 (P) L2 (P) (CONJUGATE OR FUSION PROTEIN) 4 DUPLICATE REMOVE L3 (0 DUPLICATES REMOVED)

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COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 34.98 35.19

SINCE FILE

TOTAL

ENTRY -2.48

SESSION 8

STN INTERNATIONAL LOGOFF AT 15:31:45 ON 27 JUL 2002